

Title (en)
TEM SAMPLE PREPARATION

Title (de)
TEM-PROBENVORBEREITUNG

Title (fr)
PRÉPARATION D'ÉCHANTILLONS POUR MICROSCOPIE ÉLECTRONIQUE À TRANSMISSION

Publication
EP 2668488 B1 20160921 (EN)

Application
EP 12738768 A 20120128

Priority
• US 201161437474 P 20110128
• US 2012023053 W 20120128

Abstract (en)
[origin: WO2012103534A1] An improved method of preparing ultra-thin TEM samples that combines backside thinning with an additional cleaning step to remove surface defects on the FIB-facing substrate surface. This additional step results in the creation of a cleaned, uniform hardmask that controls the ultimate results of the sample thinning, and allows for reliable and robust preparation of samples having thicknesses down to the 10nm range.

IPC 8 full level
G01N 1/28 (2006.01); **H01J 37/20** (2006.01); **H01J 37/26** (2006.01); **H01J 37/305** (2006.01)

CPC (source: EP US)
G01N 1/286 (2013.01 - EP US); **H01J 37/261** (2013.01 - US); **H01J 37/3056** (2013.01 - EP US); **G01N 2001/2886** (2013.01 - EP US); **H01J 2237/31745** (2013.01 - EP US)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2012103534 A1 20120802; CN 103403520 A 20131120; CN 103403520 B 20151223; EP 2668488 A1 20131204; EP 2668488 A4 20150304; EP 2668488 B1 20160921; JP 2014505255 A 20140227; JP 5973466 B2 20160823; US 2014217283 A1 20140807; US 2015053548 A1 20150226; US 2016020069 A1 20160121; US 8859998 B2 20141014; US 9177760 B2 20151103; US 9378925 B2 20160628

DOCDB simple family (application)
US 2012023053 W 20120128; CN 201280006697 A 20120128; EP 12738768 A 20120128; JP 2013551403 A 20120128; US 201213981563 A 20120128; US 201414502522 A 20140930; US 201514869553 A 20150929